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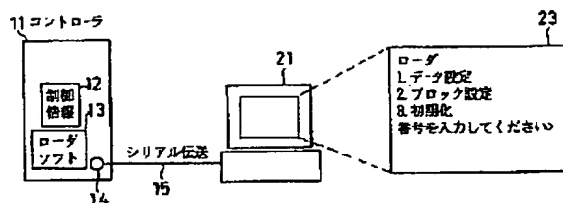
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APPLICANT : TOSHIBA CORP;

INVENTOR : IKEGAMI MANABU;

INT.CL. : G05B 19/05

TITLE : PROGRAM LOADING DEVICE



ABSTRACT : PROBLEM TO BE SOLVED: To make it possible to perform a function construction and edition of a control program by a personal computer PC regardless of a version of the control program or a loader software or a kind of the PC.

SOLUTION: In this program loading device, by connecting a programmable controller 11 and a PC 21 with a cable 15 and starting up a PC side as a communication terminal, a loader software 13 in a controller responds, and by transmitting menu information 23 to the PC side, making the PC side display and operating on the PC side in accordance with this menu, function construction, change or the like of a process control program 12 is performed. Thus, only by connecting the PC 21 to the programmable controller 11 with a cable, the function construction, change or the like of those control programs can be performed without paying attention to a version of the control program and a loader software.

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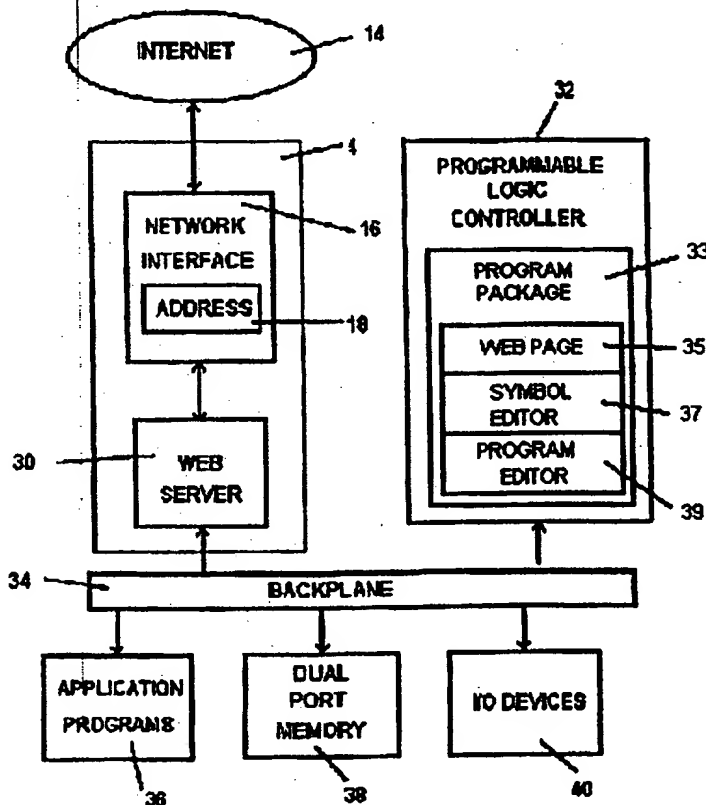
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- (51) International Patent Classification: G05B 19/05. 19/418, G06F 9/44 (74) Agent: GOLDEN, Larry, I.; General Patent Counsel, Square D Company, 1415 South Roselle Road, Palatine, IL 60067 (US).
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- (22) International Filing Date: 20 February 2001 (20.02.2001) (84) Designated States (regional): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR).
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- (71) Applicant: SCHNEIDER AUTOMATION INC. [US/US]: One High Street, North Andover, MA 01845 (US). (88) Date of publication of the international search report: 28 February 2002
- (72) Inventor: BAKER, Richard, A.; 288 Middle Street, West Newbury, MA 01985 (US). For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A WEB BROWSER



(57) Abstract: A control system includes an Internet web interface to a network of at least one programmable logic control system running an application program for controlling output devices in response to status of input devices. The Web interface runs Web pages from an Ethernet board coupled directly to the PLC back plane and includes an HTTP protocol interpreter, a PLC back plane drive, a TCP/IP stack, and an Ethernet board kernel. The web interface provides access to the PLC back plane by a user at a remote location through the Internet. The interface translates the industry standard Ethernet, TCP/IP and HTTP protocols used on the Internet into data recognizable to the PLC. Residing in the PLC is a programming package accessible to a user through this interface which will allow the user to edit programs controlling the operation of the programmable logic controller system.

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INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 01/05564

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G05B19/05 G05B19/418 G06F9/44

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G05B G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 08, 30 June 1999 (1999-06-30) & JP 11 085224 A (TOSHIBA CORP), 30 March 1999 (1999-03-30) abstract	1-20
Y	EP 0 917 034 A (ENGEL GMBH MASCHBAU) 19 May 1999 (1999-05-19) the whole document -/-	1-4, 11-14

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

Z document member of the same patent family

Date of the actual completion of the international search

1 November 2001

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08/11/2001

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 01/05564

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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E	US 6 268 853 B1 (BROOKS RUVEN E ET AL) 31 July 2001 (2001-07-31) the whole document	1-4, 11-14
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/05564

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